AMENDMENTS TO THE CLAIMS:

1. (Withdrawn) A targeting construct comprising:
   (a) a first polynucleotide sequence homologous to a low density lipoprotein-related protein 5gene;
   (b) a second polynucleotide sequence homologous to the low density lipoprotein-related protein 5 gene; and
   (c) a selectable marker.
2. (Withdrawn) The targeting construct of claim 1, wherein the targeting construct further comprises a screening marker.
3. (Withdrawn) A method of producing a targeting construct, the method comprising:
   (a) providing a first polynucleotide sequence homologous to a low density lipoprotein-related protein 5 gene;
   (b) providing a second polynucleotide sequence homologous to the low density lipoprotein-related protein 5;
   (c) providing a selectable marker; and
   (d) inserting the first sequence, second sequence, and selectable marker into a vector, to produce the targeting construct.
4. (Withdrawn) A method of producing a targeting construct, the method comprising:
   (a) providing a polynucleotide comprising a first sequence homologous to a first region of a low density lipoprotein-related protein 5 gene and a second sequence homologous to a second region of a low density lipoprotein-related protein 5 gene;
   (b) inserting a positive selection marker in between the first and second sequences to form the targeting construct.
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled) :
12. (Canceled)

13. (Withdrawn) A method of identifying an agent that modulates the expression of low density lipoprotein-related protein 5, the method comprising:
    (a) providing a cell comprising a disruption in a low density lipoprotein-related protein 5 gene;
    (b) contacting the cell with an agent; and
    (c) determining whether expression of the low density lipoprotein-related protein 5 is modulated.
14. (Withdrawn) A method of identifying an agent that modulates the function of a low density lipoprotein-related protein 5 gene, the method comprising:
    (a) providing a cell comprising a disruption in a low density lipoprotein-related protein 5 gene;
    (b) contacting the cell with an agent; and
    (c) determining whether the function of the low density lipoprotein-related protein 5 gene is modulated.
15. (Withdrawn) The method of claim 13 or claim 14, wherein the cell is derived from the non-human transgenic animal of claim 8.
16. (Withdrawn) An agent identified by the method of claim 11, claim 12, claim 13, or claim 14.
17. (Currently amended) A transgenic mouse whose genome comprises a disruption in an endogenous low density lipoprotein-related protein 5 gene, wherein where the disruption is homozygous, the transgenic mouse, as a result of the disruption, lacks production of low density lipoprotein-related protein 5 and exhibits at least one of the following, relative to a wild-type mouse: retinal degeneration, increased anxiety or hypoactivity.
18. (Currently amended) The transgenic mouse of claim 17, wherein the increased anxiety comprises ~~is characterized by~~ a decrease in time spent in a central region of an open field environment, relative to a wild-type mouse.
19. (Currently amended) The transgenic mouse of claim 17, wherein the hypoactivity comprises ~~is characterized by~~ a decrease in total distance traveled in an open field environment, relative to a wild-type mouse.
20. (Canceled).
21. (Canceled)
22. (Canceled)

23. (Canceled)

24. (Currently amended) A method of producing a transgenic mouse whose genome comprises a disruption in an endogenous low density lipoprotein-related protein 5 gene, the method comprising:

(a) providing a mouse embryonic stem cell comprising a disruption in an endogenous low density lipoprotein-related protein 5 gene; and

(b) introducing the mouse embryonic stem cell into a mouse blastocyst;

(c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein the pseudopregnant mouse gives birth to a chimeric mouse; and

(d) breeding the chimeric mouse to produce the transgenic mouse;

wherein where the disruption is homozygous, the transgenic mouse, as a result of the disruption, lacks production of functional low density lipoprotein-related protein 5 and exhibits at least one of the following, relative to a wild-type mouse: retinal degeneration, increased anxiety or hypoactivity.

25. (Canceled)